

ABSTRACT OF THE DISCLOSURE

The present invention provides nucleic acids and polypeptide sequences for a novel class of expansin-related proteins, designated group 2/3 allergen, which comprise the group 2 and group 3 allergens from grass, a purified group 3 allergen Lol p 3, and method of 5 using the nucleic acids sequences and proteins of the invention. Group 2/3 allergens of the invention are significant wall-loosening agents. They are capable of altering cell wall properties, which may effect growth, flexibility, and mechanical strength in tissues in which they are expressed.